

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMEF 2020 R0
Status: Active

Instrument # 100344

Start Date: 06/02/20

Analysts: Derek Walton

Reason for instrument evaluation

Preventative Maintenance Due

Visual Inspection

- | | |
|---|---|
| <input checked="" type="checkbox"/> Clean | <input checked="" type="checkbox"/> Replace missing screws |
| <input checked="" type="checkbox"/> Cermetex Box is secure | <input checked="" type="checkbox"/> Ensure modem cable present |
| <input checked="" type="checkbox"/> Gas Valve upright or secured to wall | <input checked="" type="checkbox"/> All tubing and connections are secure |
| <input checked="" type="checkbox"/> O-ring inspection and ensure 2 O-rings in replacement bag | |

Troubleshooting/Repair

Replaced o-ring. Added modem cable. Tightened source block to sample chamber connection. Repaired the wires to the filter solenoid in 3 places (cracked coating) with electrical tape.

Adjusted lamp and cooler voltages. Received 2 gas flow errors on VICS. Tried different dry gas tank. Received another gas flow error. Replaced the regulator (older style).

- VOC (attached)
 Internal Standard value $\leq 3.00\%$ ND
 Verify software version

- | | |
|---|---|
| <input type="checkbox"/> Return to Factory for Repair | <input checked="" type="checkbox"/> Ready for Calibration |
| <input type="checkbox"/> Ready for Certification | <input type="checkbox"/> Proceed to Close Out |

End Date: 06/02/20

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100344

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 06/02/2020

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 419 psi

BLANK TEST 0.000 15:44
INTERNAL STANDARD VERIFIED 15:44

Gas Flow Error

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
Breath Tube = 48.1°C PASSED

PUMP INFO

Flow Rate = 6.108 L/M PASSED

DETECTOR INFO

PUMP ON PASSED
PUMP OFF PASSED

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100344

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 06/02/2020

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 322 psi

BLANK TEST	0.000	16:49
INTERNAL STANDARD	VERIFIED	16:49
Xq = 0.108	(3.71%)	
EXTERNAL STANDARD	0.078	16:49
X[1] = 0.0776 (-0.0022)	(0.0012)	
BLANK TEST	0.000	16:50
EXTERNAL STANDARD	0.077	16:50
X[1] = 0.0775 (-0.0025)	(0.0010)	
BLANK TEST	0.000	16:51
EXTERNAL STANDARD	0.078	16:51
X[1] = 0.0779 (-0.0023)	(0.0012)	
BLANK TEST	0.000	16:52
EXTERNAL STANDARD	0.078	16:52
X[1] = 0.0778 (-0.0021)	(0.0011)	
BLANK TEST	0.000	16:53
EXTERNAL STANDARD	0.078	16:53
X[1] = 0.0779 (-0.0024)	(0.0013)	
BLANK TEST	0.000	16:54

Average = 0.0778
Std Dev = 0.0004

Diagnostic Check

VERSIONS
DMT: 3.02 ✓
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.25 V PASSED
(1.29 V - 3.01 V)
Cooler Voltage = 1.94 V PASSED
(1.04 V - 2.44 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 5.936 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 V <= 0.010 V)
PUMP OFF PASSED
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED
Xq = 0.108 3.54% (0.00% - 4.00%)